View, add and edit your notes in the app

Coursera - Creating an AWS EC2 Autoscaling Group using Load Balancer

Generated on December 20, 2023

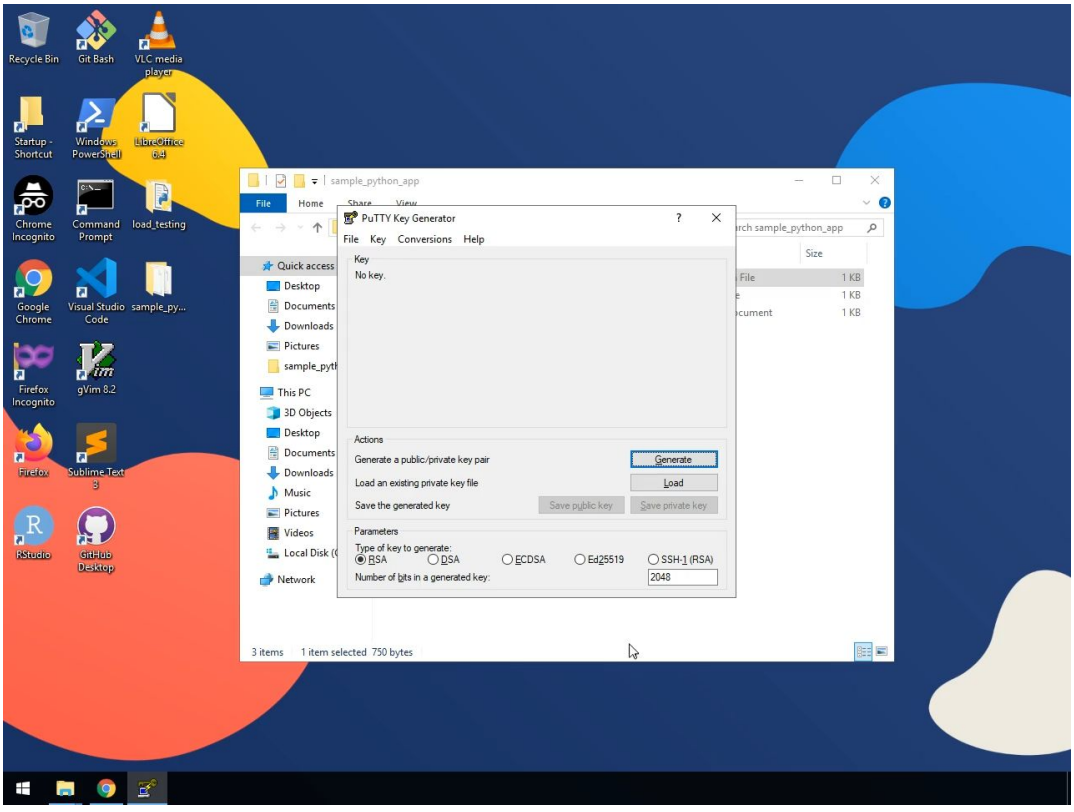
Summary

Notes	Screenshots	Bookmarks
24	29	0

Task 2:

Deploying A Sample Application On Your EC2 Server And Creating An AMI

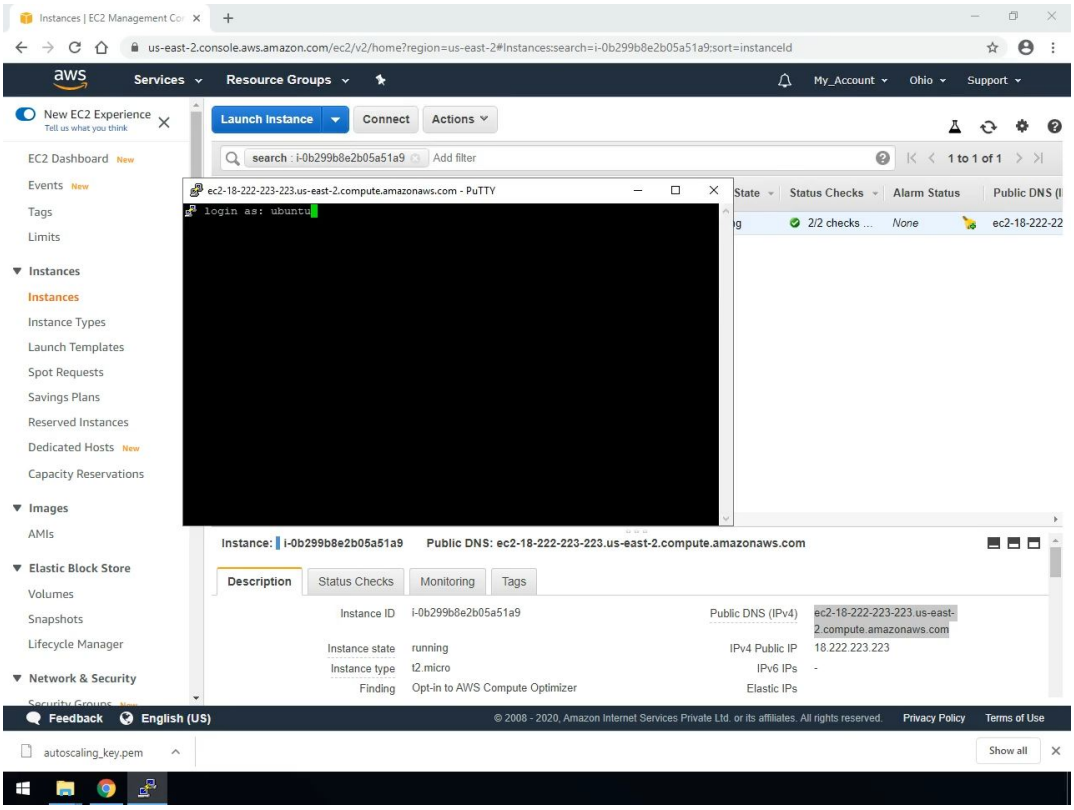
0:02



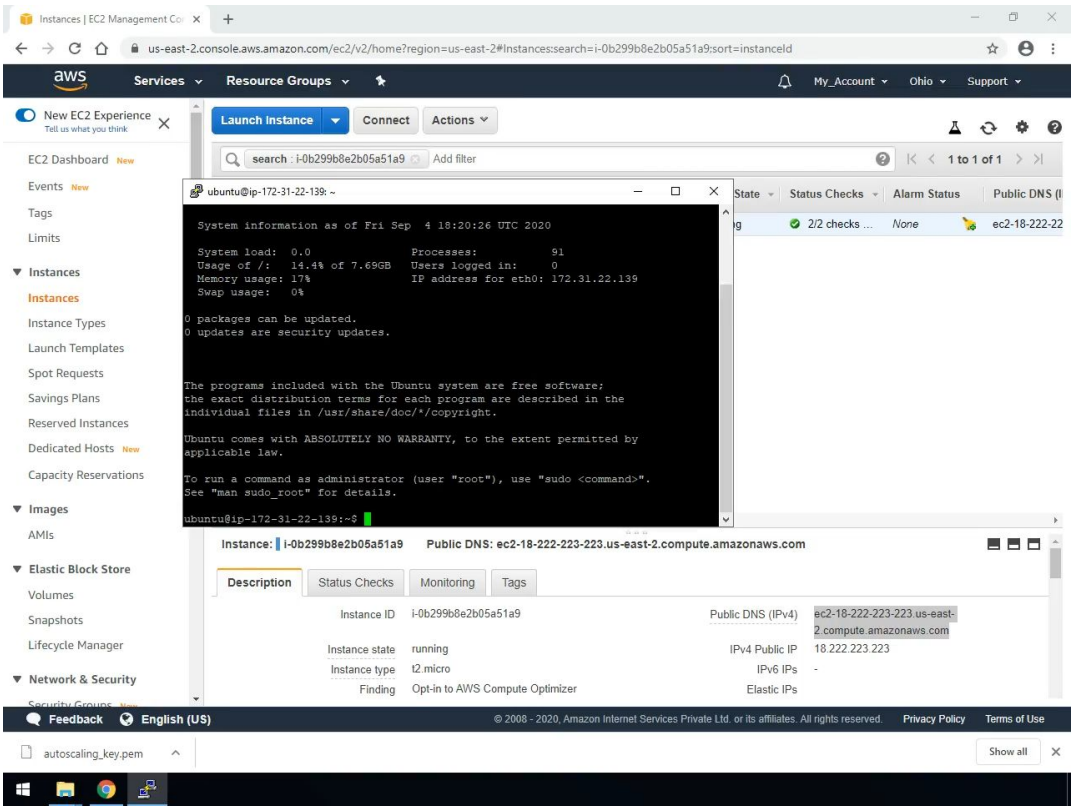
2:09

Connecting with Ec2 using PUTTY

2:09



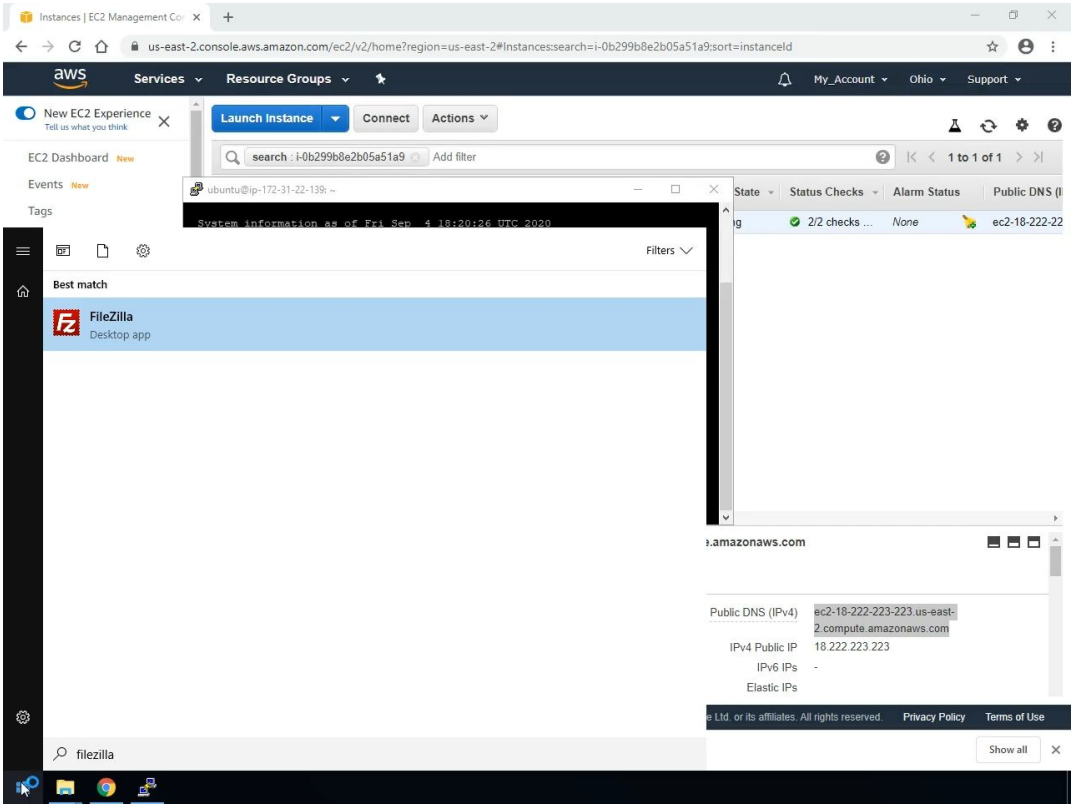
4:43



4:47

we are logined in now

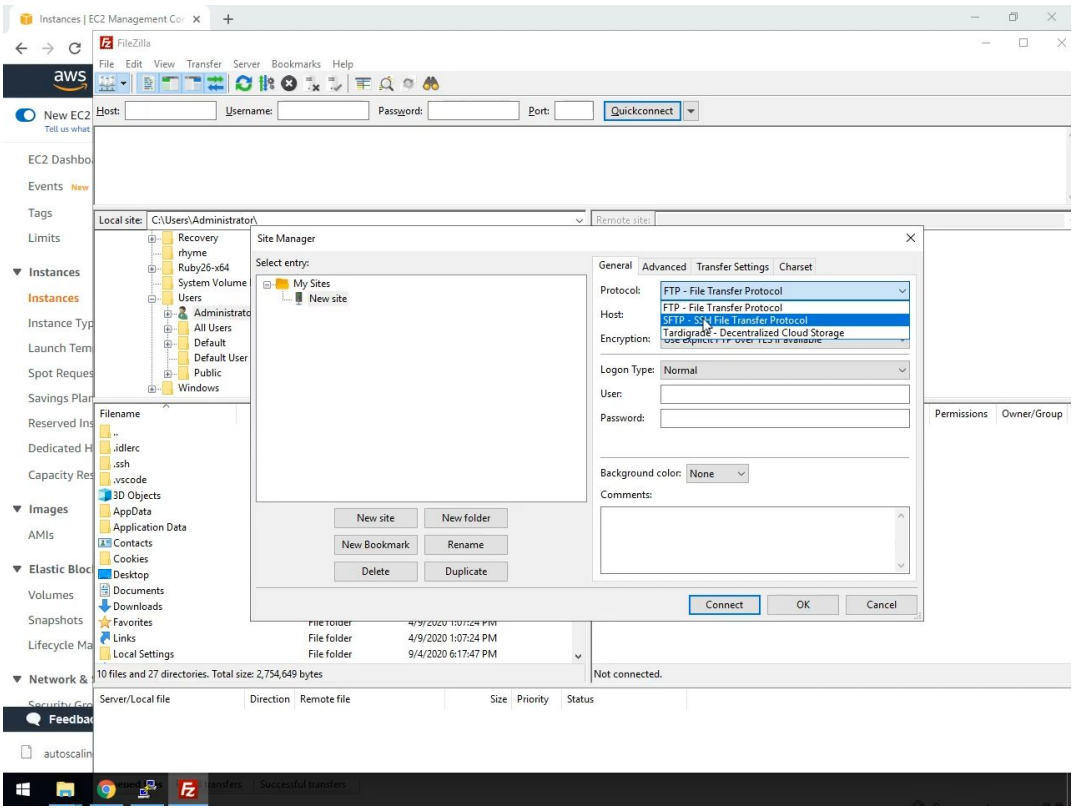
4:49



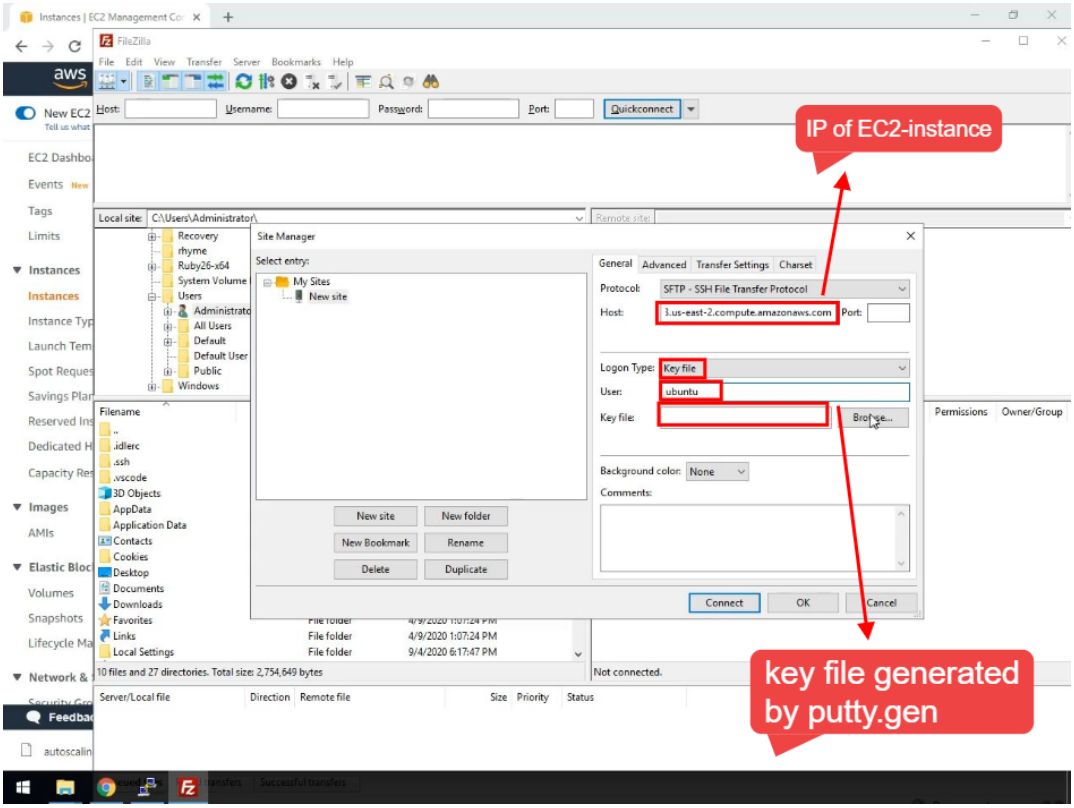
5:08

filezilla provide user-interface to transfer files from computer to remote instance

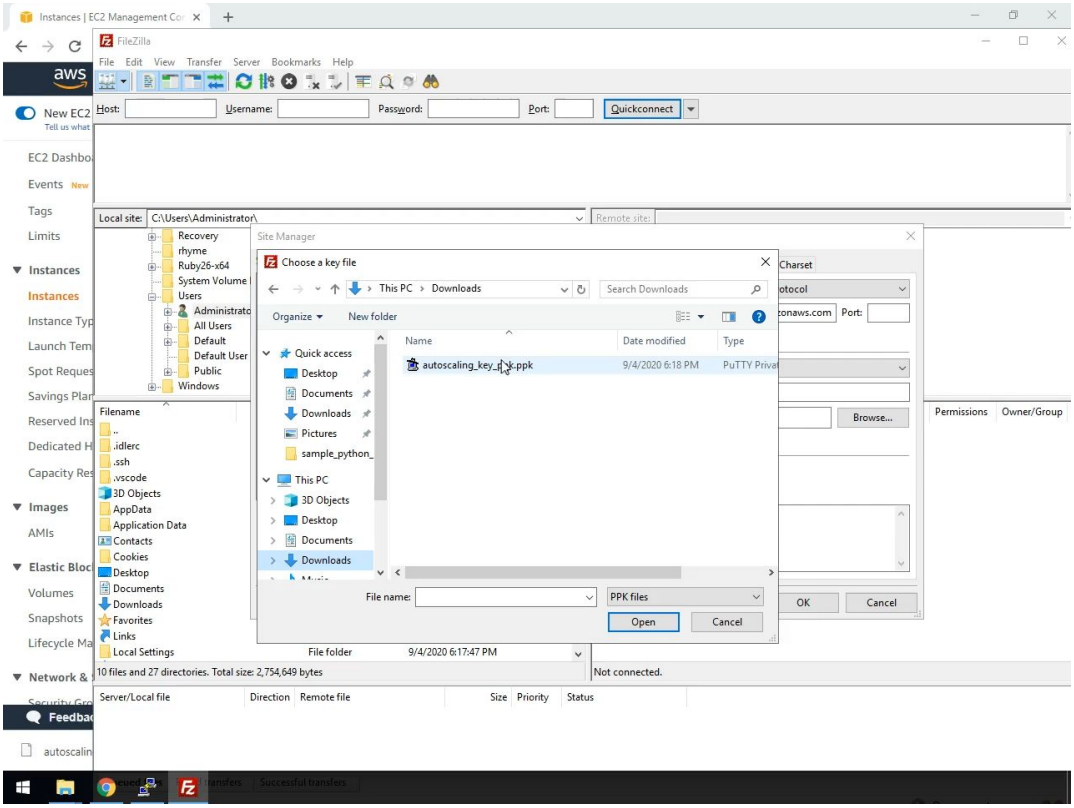
5:44



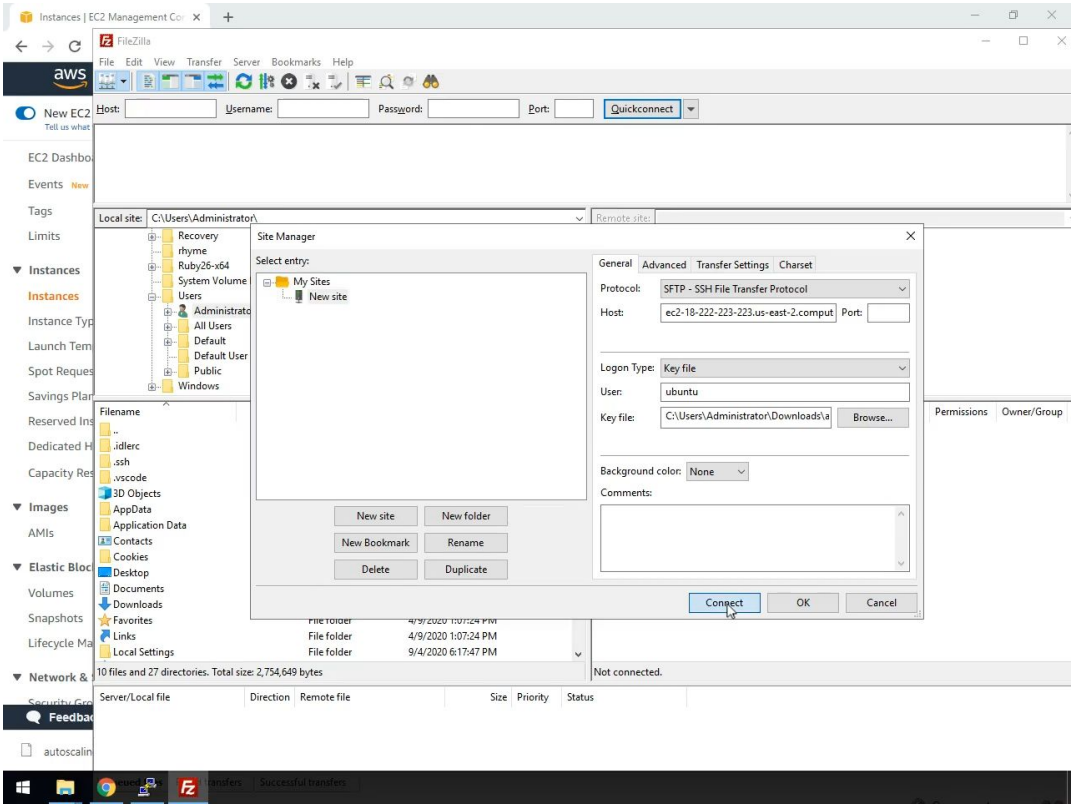
6:02



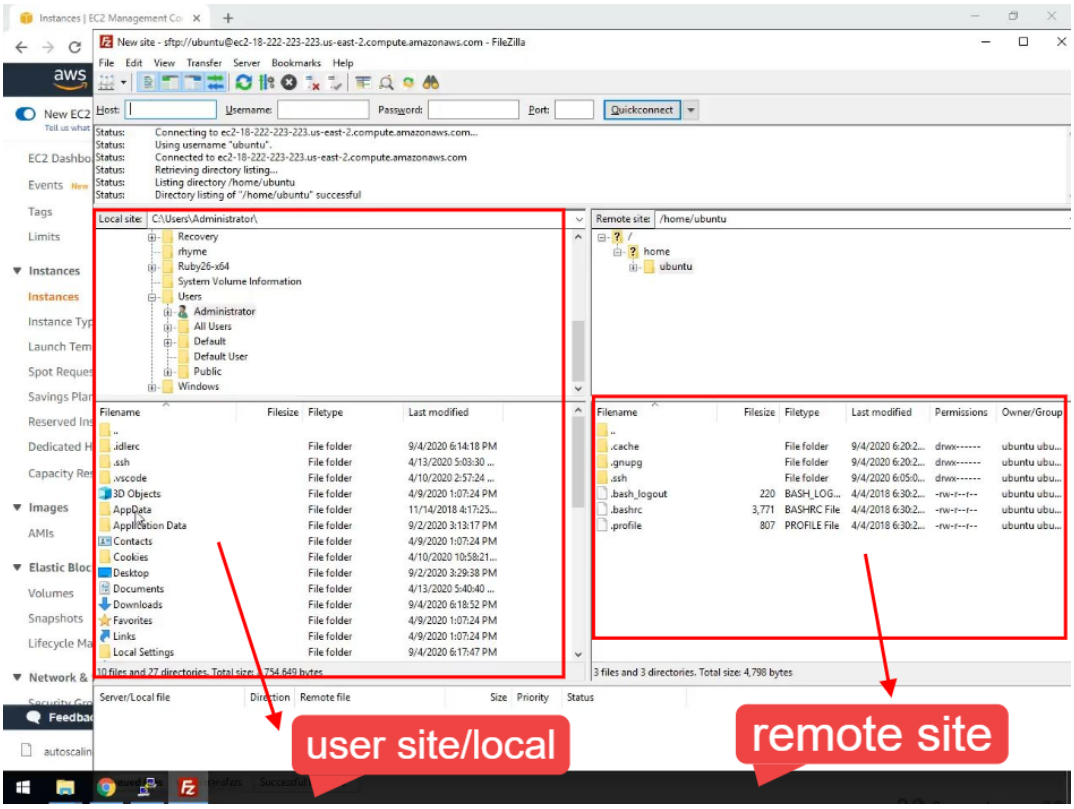
▷ 6:13



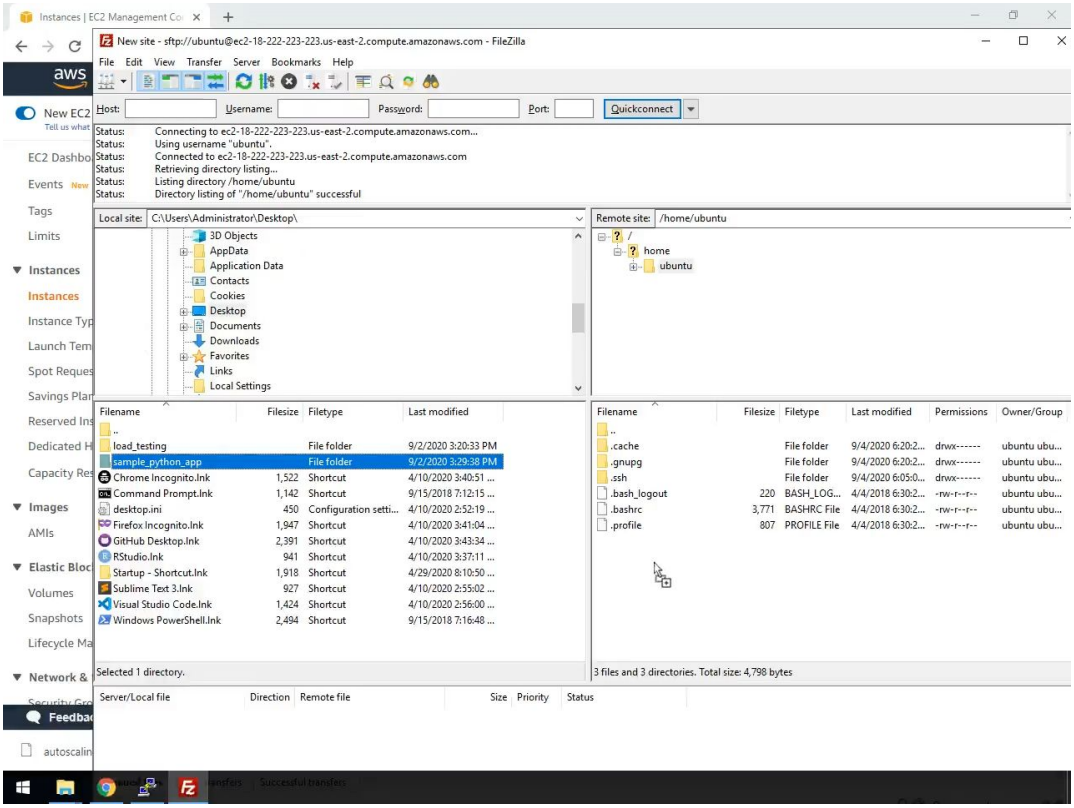
▷ 6:22


FileZilla
Site Manager
Select entry:
My Sites
New site
General
Advanced
Transfer Settings
Charset
Protocol:
SFTP - SSH File Transfer Protocol
Host:
ec2-18-222-223-223.us-east-2.comput
Port:
Logon Type:
Key file
User:
ubuntu
Key file:
C:\Users\Administrator\Downloads\a
Browse...
Background color:
None
Comments:
New site
New folder
New Bookmark
Rename
Delete
Duplicate
Connect
OK
Cancel

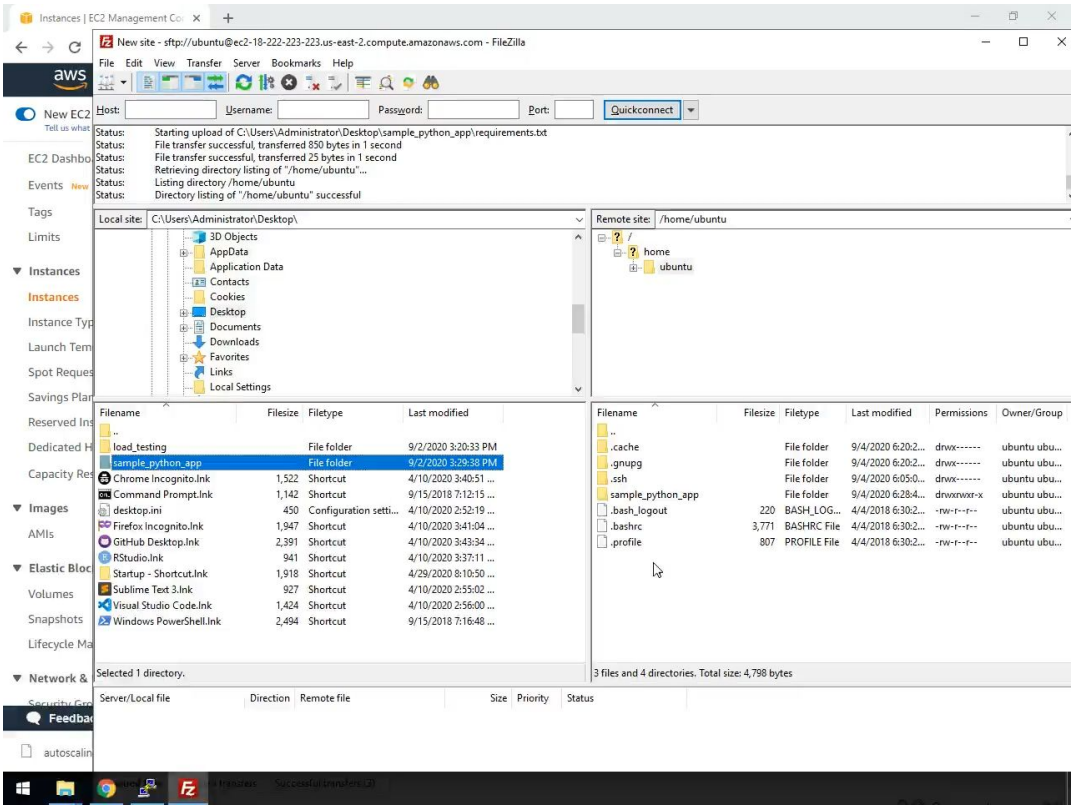
6:41


user site/local
remote site

6:50



▷ 7:06



▷ 7:11

drag and drop the file !!!

7:12

now go to the connected putty

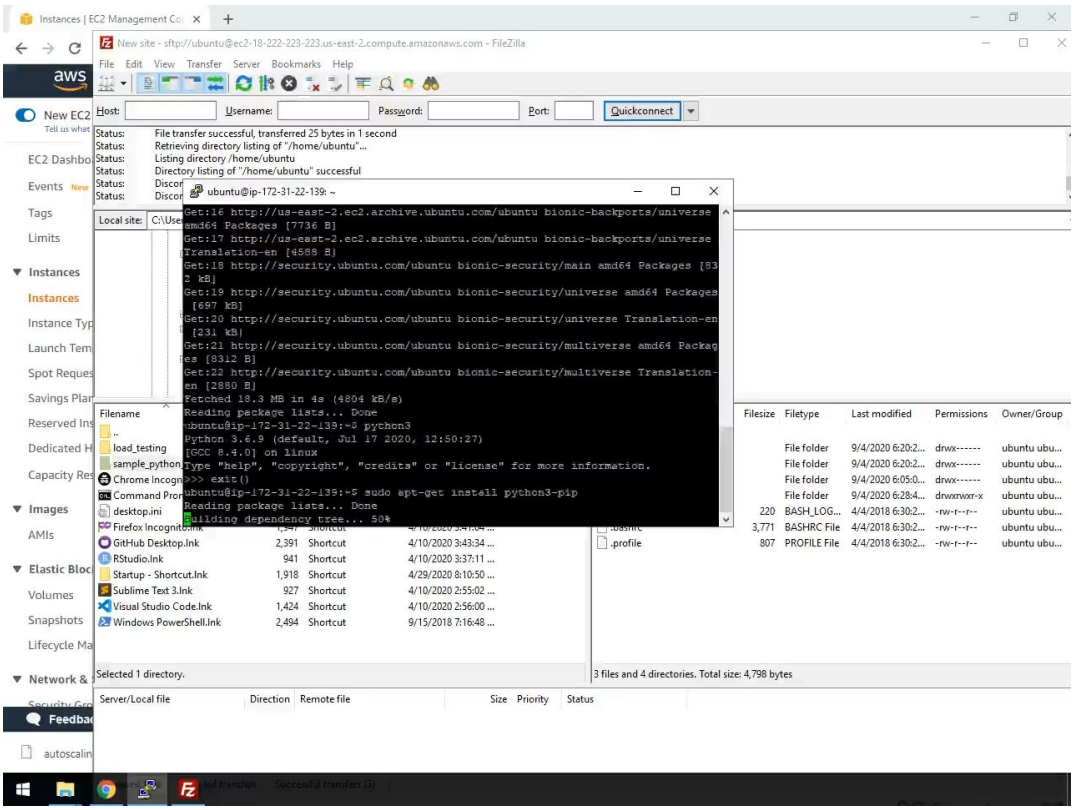
and update the instance

sudo apt upadate -y

7:34

check if python3 is install or not?

7:46



8:10

sudo apt-get install python3-pip

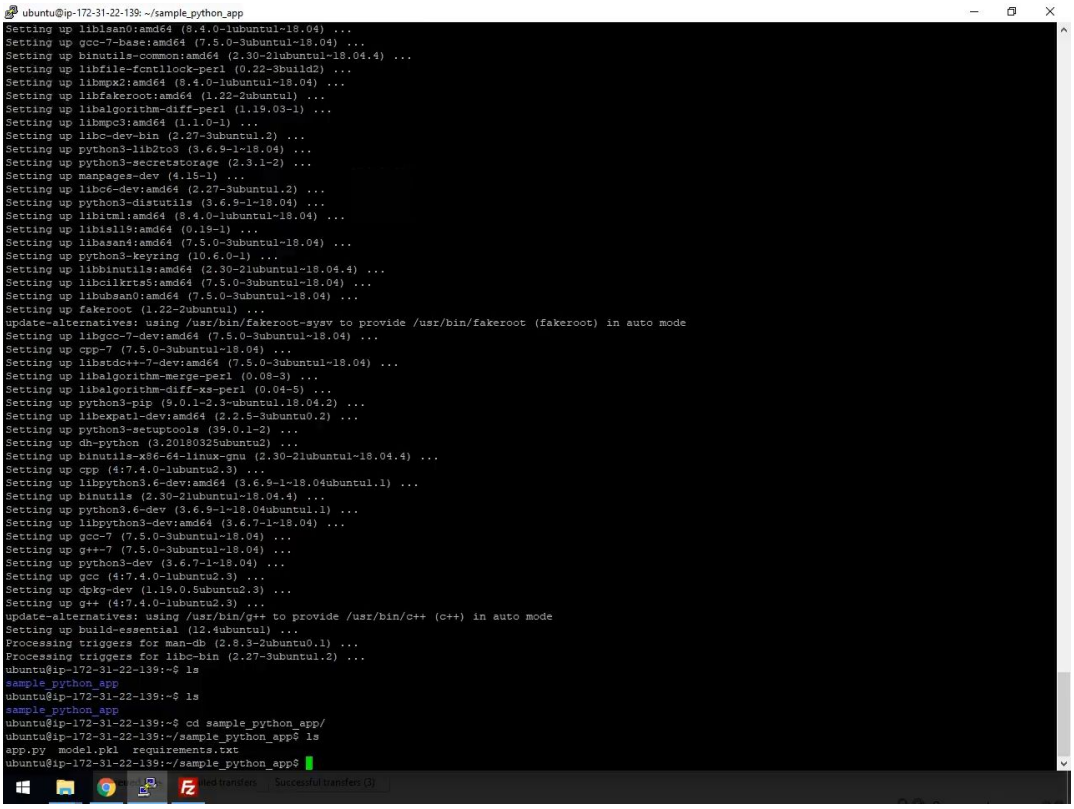
install the python packages

8:10

now do

ls and you will see the application is moved successfully

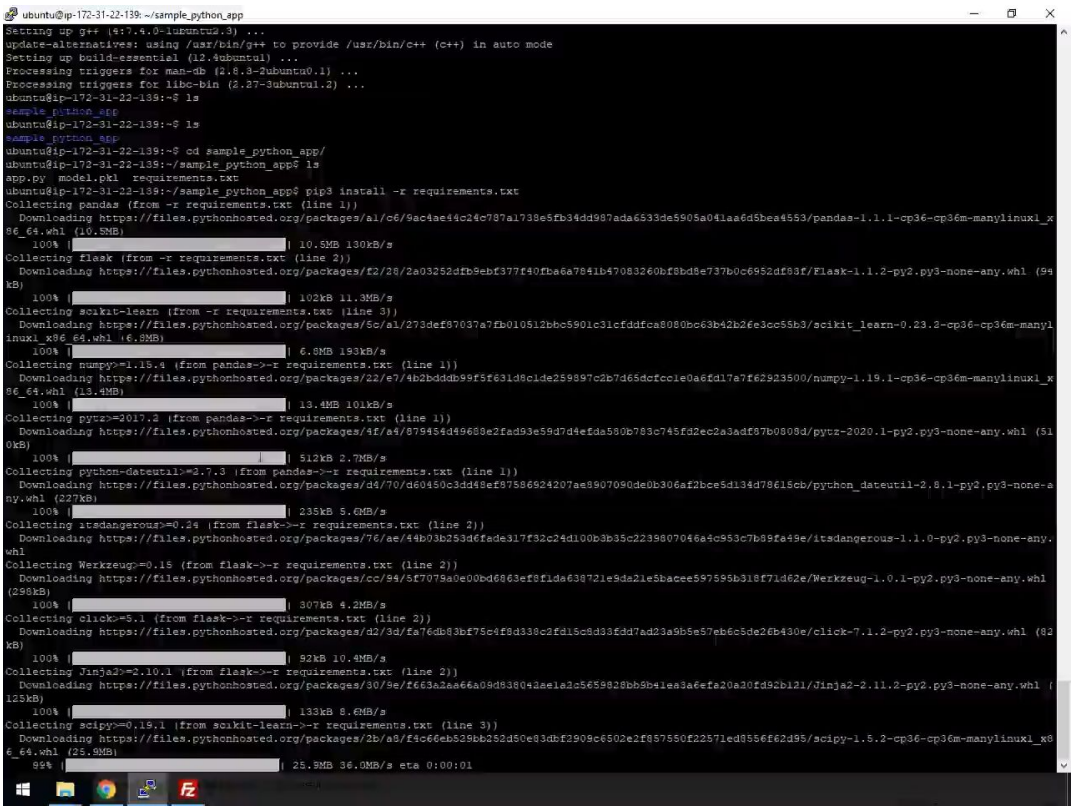
9:10



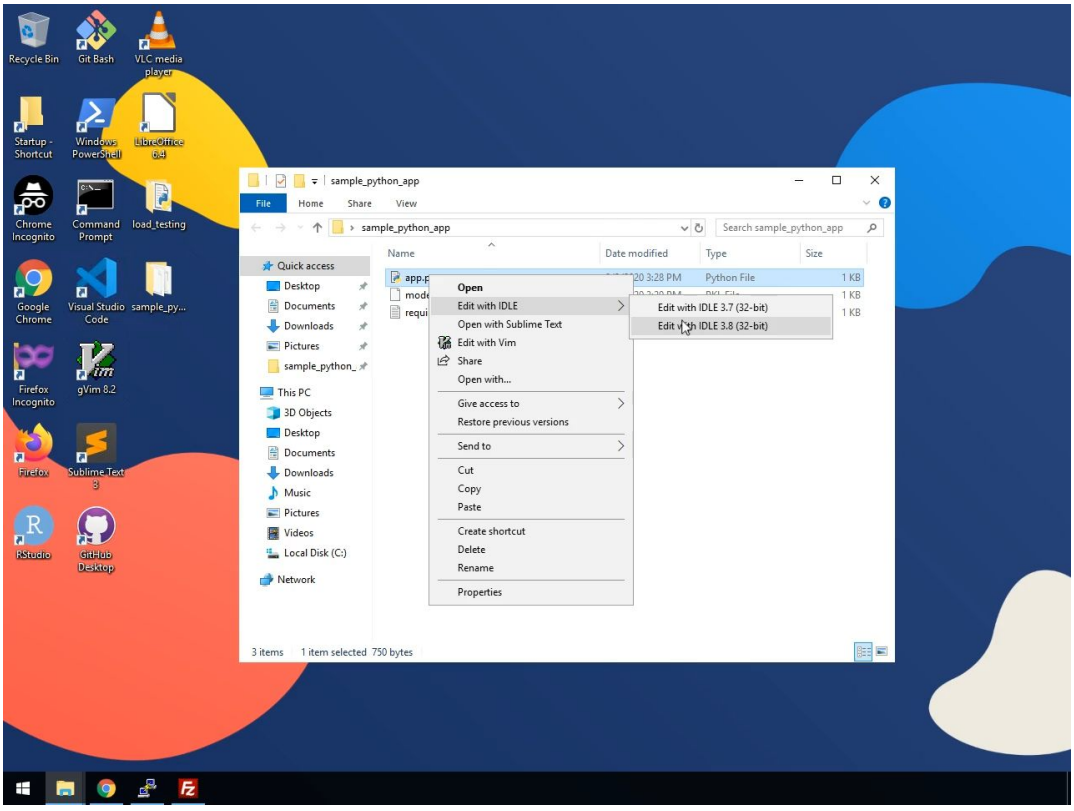
9:18

use pip to install all the dependencies from the requirements.txt file

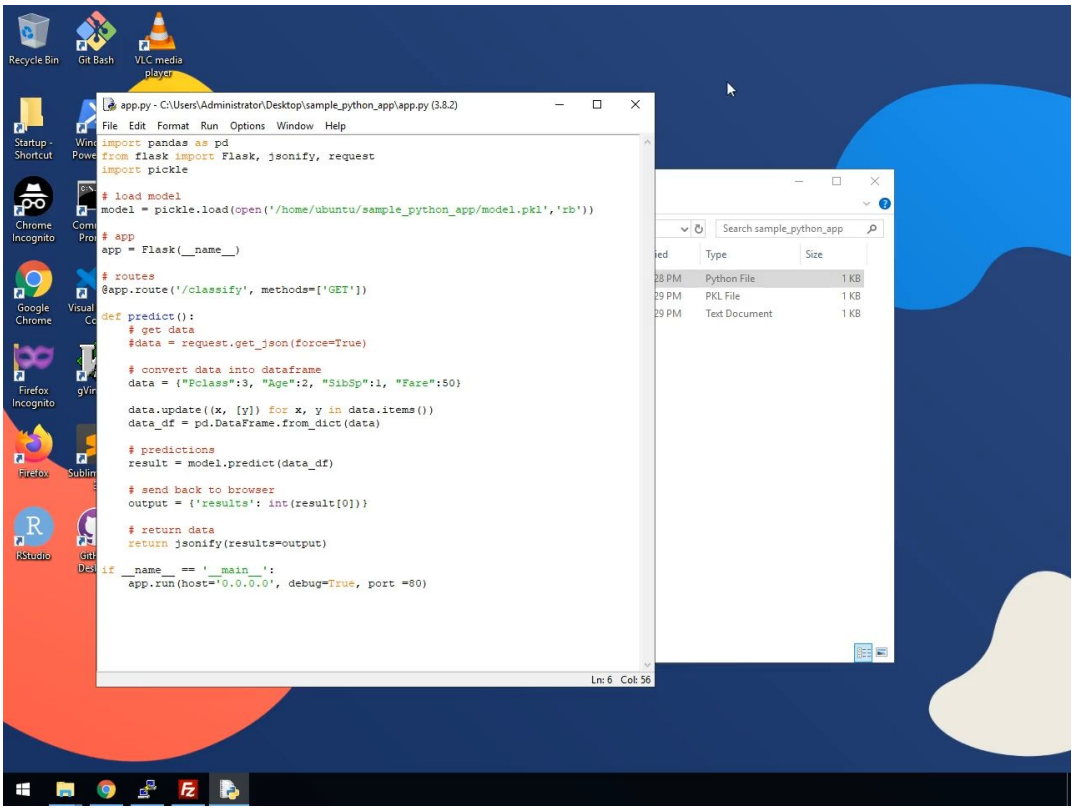
9:41


ubuntu@ip-172-31-22-139: ~/sample_python_app
Setting up g++ (4:7.4.0-1ubuntu2.3) ...
update-alternatives: using /usr/bin/g++ to provide /usr/bin/c++ (c++) in auto mode
Setting up build-essential (12.4ubuntu1) ...
Processing triggers for man-db (2.8.3-2ubuntu0.1) ...
Processing triggers for libc-bin (2.27-3ubuntu1.2) ...
ubuntu@ip-172-31-22-139:~$ ls
sample_python_app
ubuntu@ip-172-31-22-139:~$ ls
sample_python_app
ubuntu@ip-172-31-22-139:~$ cd sample_python_app/
ubuntu@ip-172-31-22-139:~/sample_python_app$ ls
app.py model.pkl requirements.txt
ubuntu@ip-172-31-22-139:~/sample_python_app$ pip3 install -r requirements.txt
Collecting pandas (from -r requirements.txt (line 1))
Downloading https://files.pythonhosted.org/packages/a1/c6/9ac4ae44c24e787a1738e5fb34dd987ada6533de5905a041aa6d5bea4553/pandas-1.1.1-cp36-cp36m-manylinux1_x86_64.whl (10.5MB)
100% | 10.5MB 130kB/s
Collecting flask (from -r requirements.txt (line 2))
Downloading https://files.pythonhosted.org/packages/f2/28/2a03252dfb9ebf377f40fba6a7841b47083260bf8bd8e737b0c6952df83f/Flask-1.1.2-py2.py3-none-any.whl (94kB)
100% | 102kB 11.3MB/s
Collecting scikit-learn (from -r requirements.txt (line 3))
Downloading https://files.pythonhosted.org/packages/5c/a1/273def87037a7fb010512bbc5901c31cfddfca8080bc63b42b26e3cc55b3/scikit_learn-0.23.2-cp36-cp36m-manylinux1_x86_64.whl (6.8MB)
100% | 6.8MB 193kB/s
Collecting numpy>=1.15.4 (from pandas->-r requirements.txt (line 1))
Downloading https://files.pythonhosted.org/packages/22/e7/4b2bdddb99f5f631d8c1de259897c2b7d65dcfcc1e0a6fd17a7f62923500/numpy-1.19.1-cp36-cp36m-manylinux1_x86_64.whl (13.4MB)
100% | 13.4MB 101kB/s
Collecting pytz>=2017.2 (from pandas->-r requirements.txt (line 1))
Downloading https://files.pythonhosted.org/packages/4f/a4/879454d49688e2fad93e59d7d4efda580b783c745fd2ec2a3adf87b0808d/pytz-2020.1-py2.py3-none-any.whl (510kB)
100% | 512kB 2.7MB/s
Collecting python-dateutil>=2.7.3 (from pandas->-r requirements.txt (line 1))
Downloading https://files.pythonhosted.org/packages/d4/70/d60450c3dd48ef87586924207ae8907090de0b306af2bce5d134d78615cb/python_dateutil-2.8.1-py2.py3-none-any.whl (227kB)
100% | 235kB 5.6MB/s
Collecting itsdangerous>=0.24 (from flask->-r requirements.txt (line 2))
Downloading https://files.pythonhosted.org/packages/76/ae/44b03b253d6fade317f32c24d100b3b35c2239807046a4c953c7b89fa49e/itsdangerous-1.1.0-py2.py3-none-any.whl
Collecting Werkzeug>=0.15 (from flask->-r requirements.txt (line 2))
Downloading https://files.pythonhosted.org/packages/cc/94/5f7079a0e00bd6863ef8f1da638721e9da21e5bacee597595b318f71d62e/Werkzeug-1.0.1-py2.py3-none-any.whl (298kB)
100% | 307kB 4.2MB/s
Collecting click>=5.1 (from flask->-r requirements.txt (line 2))
Downloading https://files.pythonhosted.org/packages/d2/3d/fa76db83bf75c4f8d338c2fd15c8d33fdd7ad23a9b5e57eb6c5de26b430e/click-7.1.2-py2.py3-none-any.whl (82kB)
100% | 92kB 10.4MB/s
Collecting Jinja2>=2.10.1 (from flask->-r requirements.txt (line 2))
Downloading https://files.pythonhosted.org/packages/30/9e/f663a2aa66a09d838042ae1a2c5659828bb5b41ea3a6efa20a20fd92b121/Jinja2-2.11.2-py2.py3-none-any.whl (125kB)
100% | 133kB 8.6MB/s
Collecting scipy>=0.19.1 (from scikit-learn->-r requirements.txt (line 3))
Downloading https://files.pythonhosted.org/packages/2b/a8/f9c66eb529bb252d50e83dbf2909c6502e2f857550f22571ed8556f62d95/scipy-1.5.2-cp36-cp36m-manylinux1_x86_64.whl (25.9MB)
99% | 25.9MB 36.0MB/s eta 0:00:01

9:51


Recycle Bin
Git Bash
VLC media player
Startup - Shortcut
Windows PowerShell
LibreOffice 6.4
Chrome Incognito
Command Prompt
load_testing
Google Chrome
Visual Studio Code
sample_py...
Firefox Incognito
gVim 8.2
Firefox
Sublime Text 3
RStudio
GitHub Desktop
sample_python_app
File
Home
Share
View
Search sample_python_app
Quick access
Desktop
Documents
Downloads
Pictures
sample_python_
This PC
3D Objects
Desktop
Documents
Downloads
Music
Pictures
Videos
Local Disk (C:)
Network
Name
Date modified
Type
Size
Python File
1 KB
Open
Edit with IDLE
Open with Sublime Text
Edit with Vim
Share
Open with...
Give access to
Restore previous versions
Send to
Cut
Copy
Paste
Create shortcut
Delete
Rename
Properties
Edit with IDLE 3.7 (32-bit)
Edit with IDLE 3.8 (32-bit)
3 items
1 item selected 750 bytes

10:42



10:54

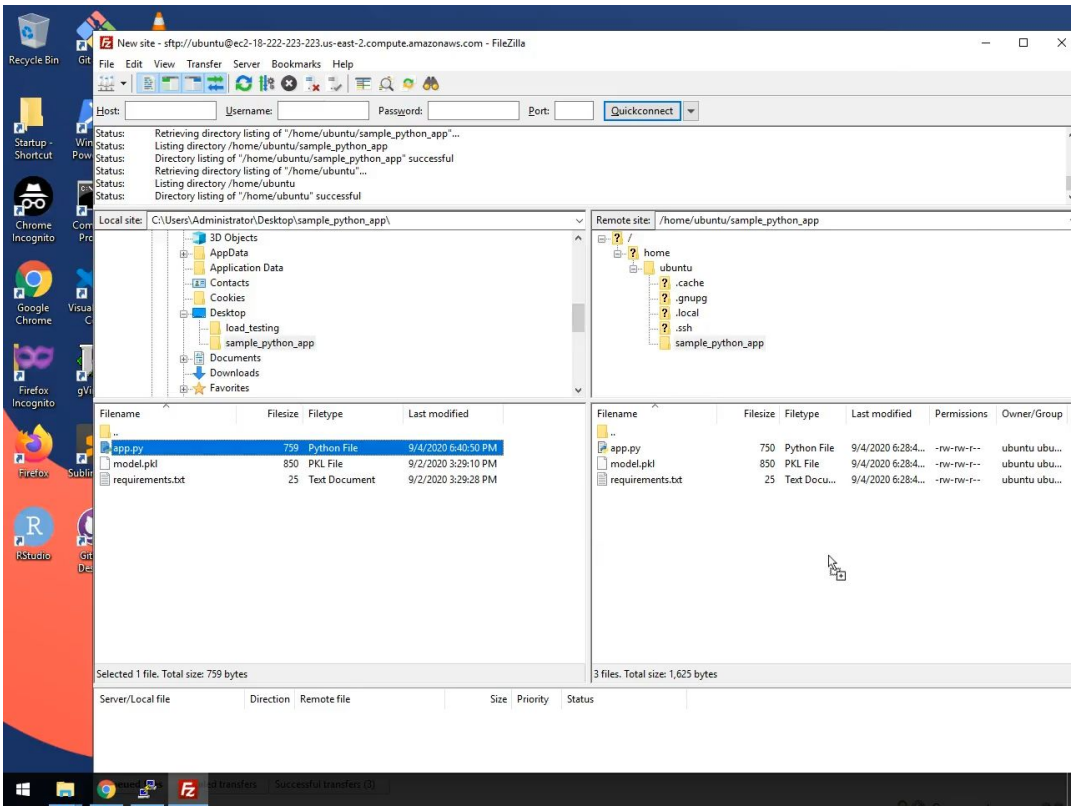
change the name from test to sample_python_app

10:54

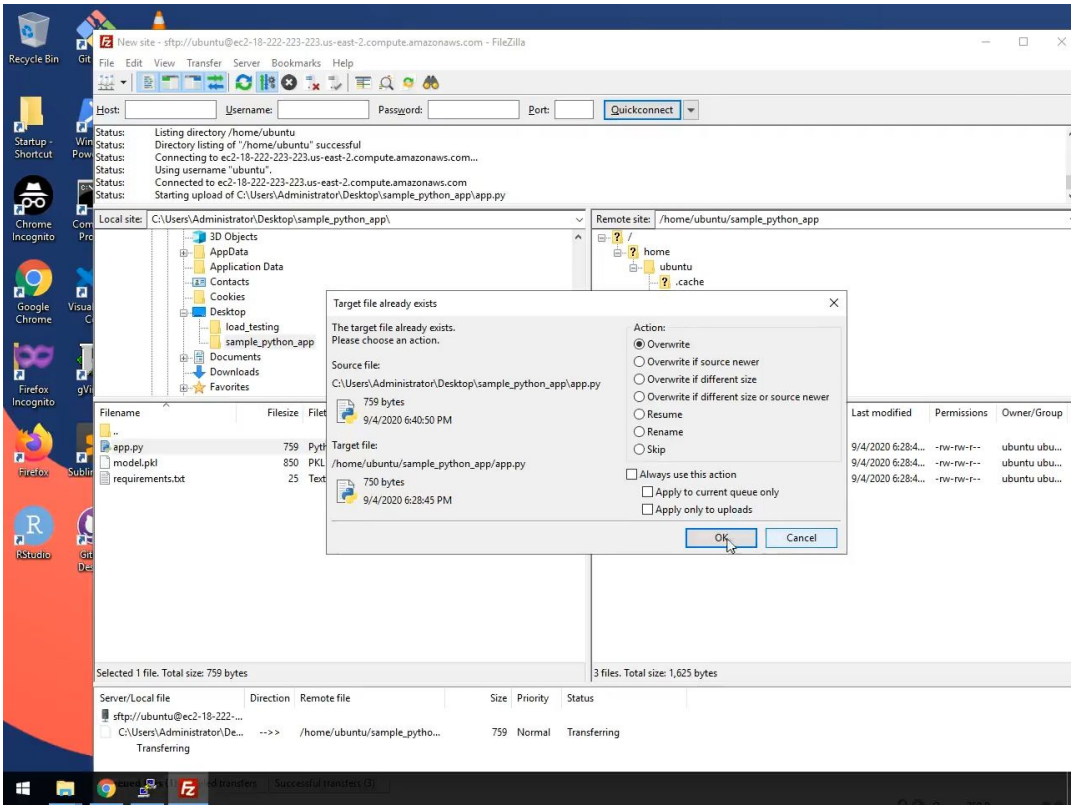
now transfer the edit file to the host-server

…

11:04



11:10



11:14

replaced the app.py file in the host-server from local

11:20

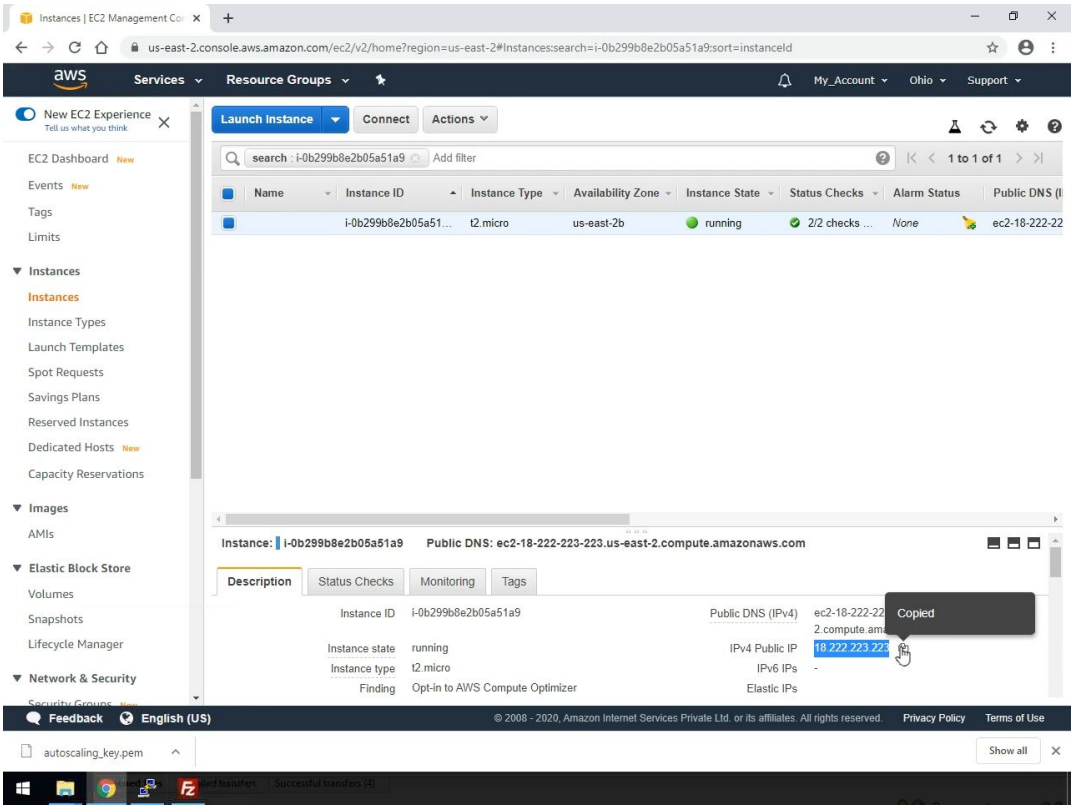
use command

sudo python3 app.py

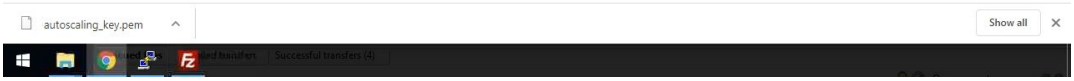
this will run our app on port 80

>>let’s check it

11:43



11:49



12:08

so our application is up and running

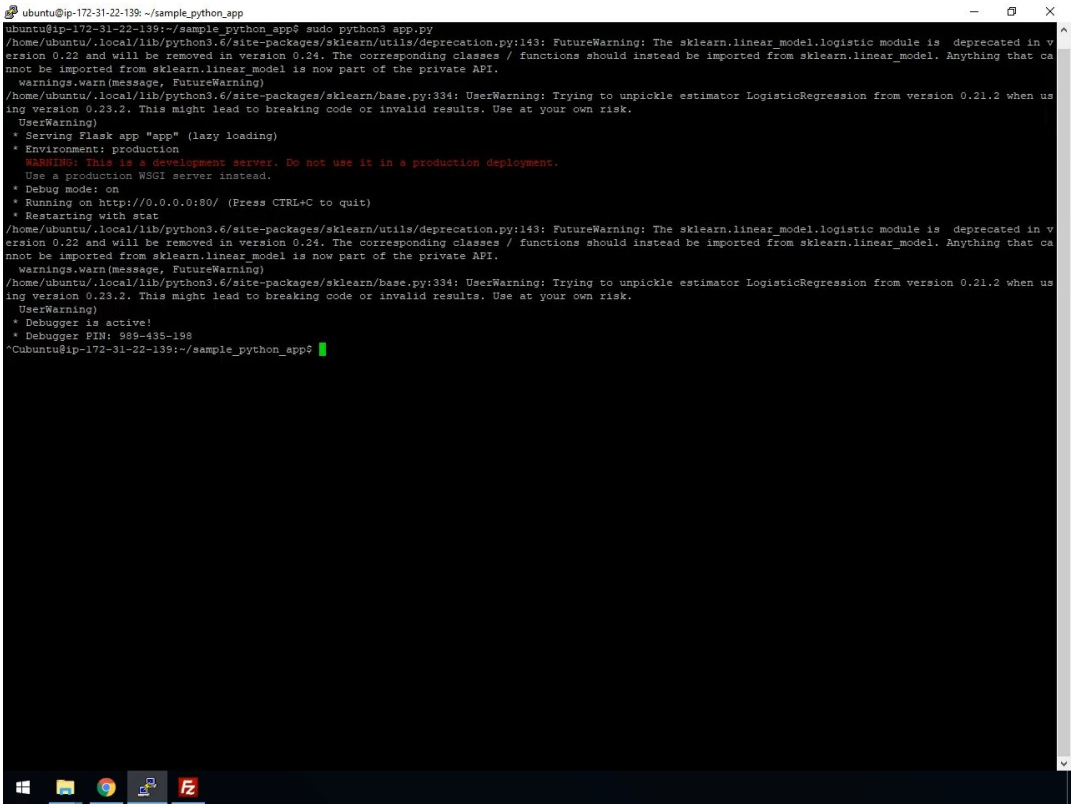
12:08

we want that if something happens like rebooting the system , so our application donot disturb and still running and available

so we will use chronetab and in chronetab our app will still run in background if something unexpected happens

so our python-script or application is always running even if we are not connected

12:48



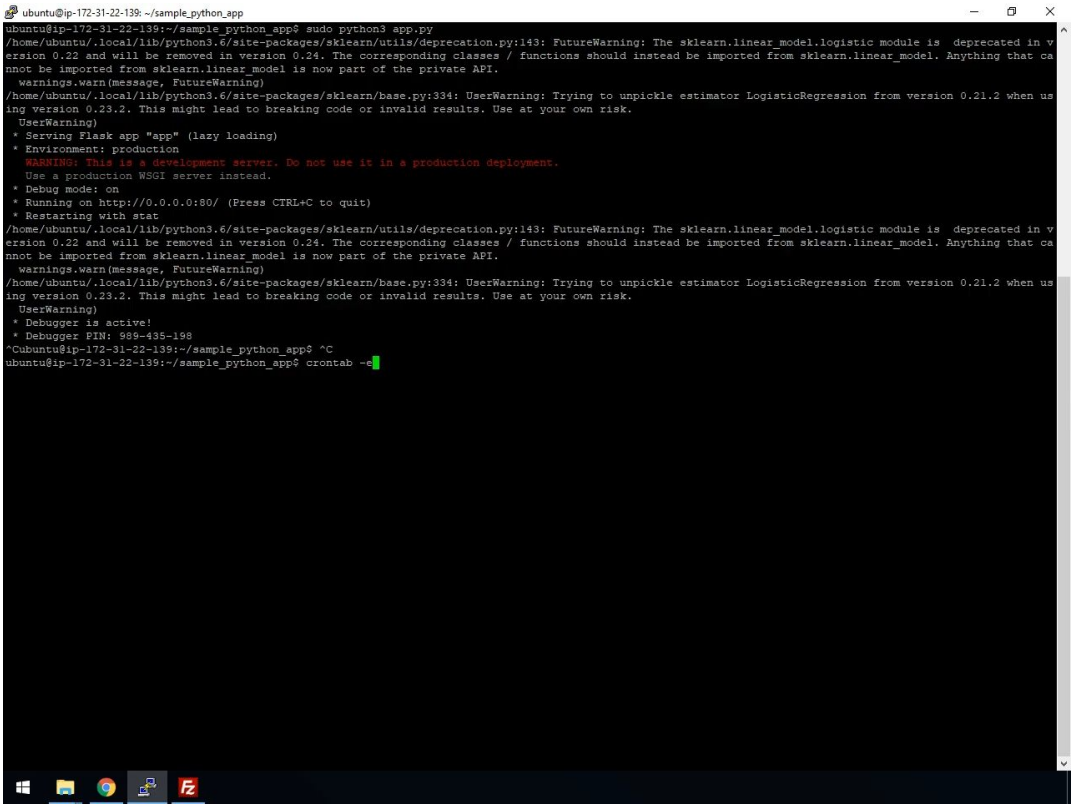
13:31

stop the server here!

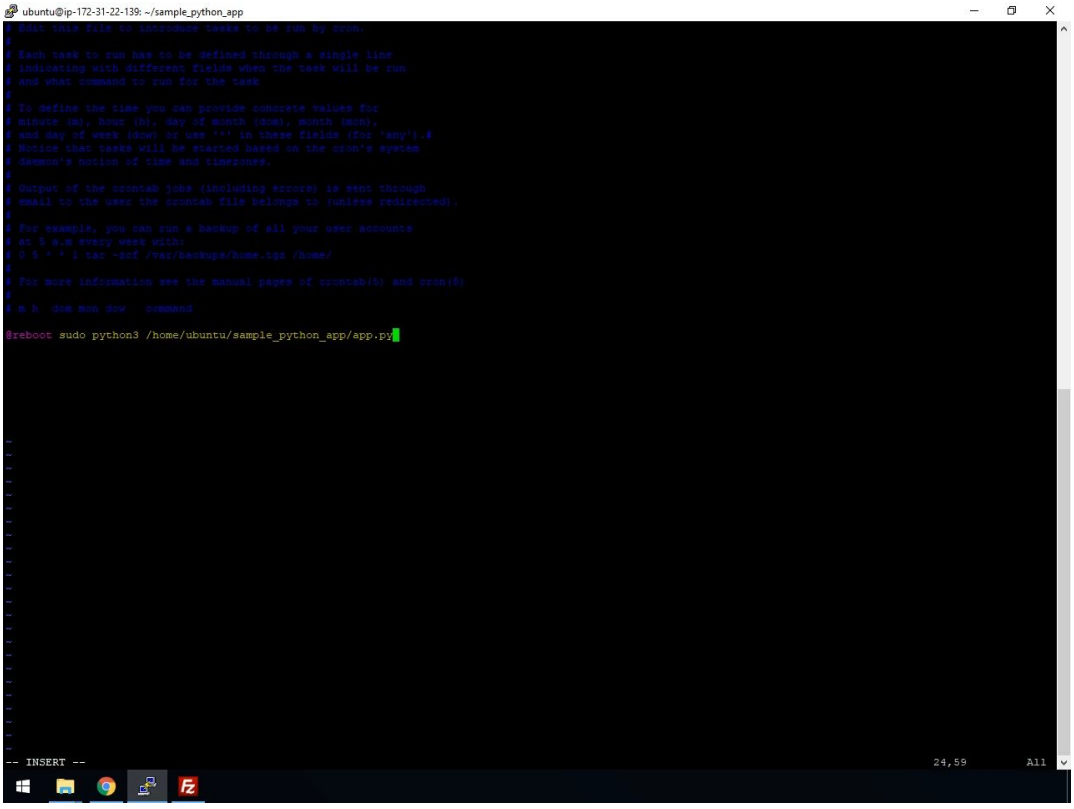
13:32

opening cronetab

13:36



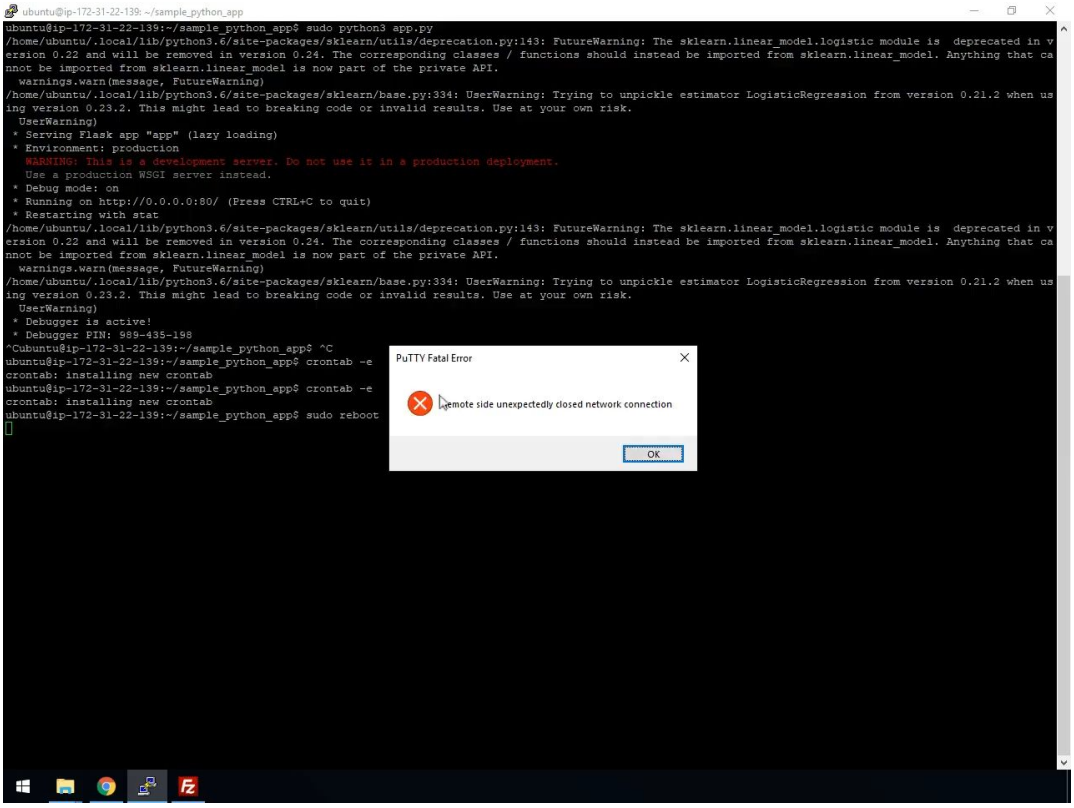
13:36



14:12

save it

14:13



14:55

rebooting the server

sudo reboot

14:59

15:44

we we will wait for rebooting and then check the web-app that

the app is still running or not ?

hit refresh and see !

>>> yeah ! the app is running successfully

15:44

now we will create an AMI

15:57

this AMI is just like docker image

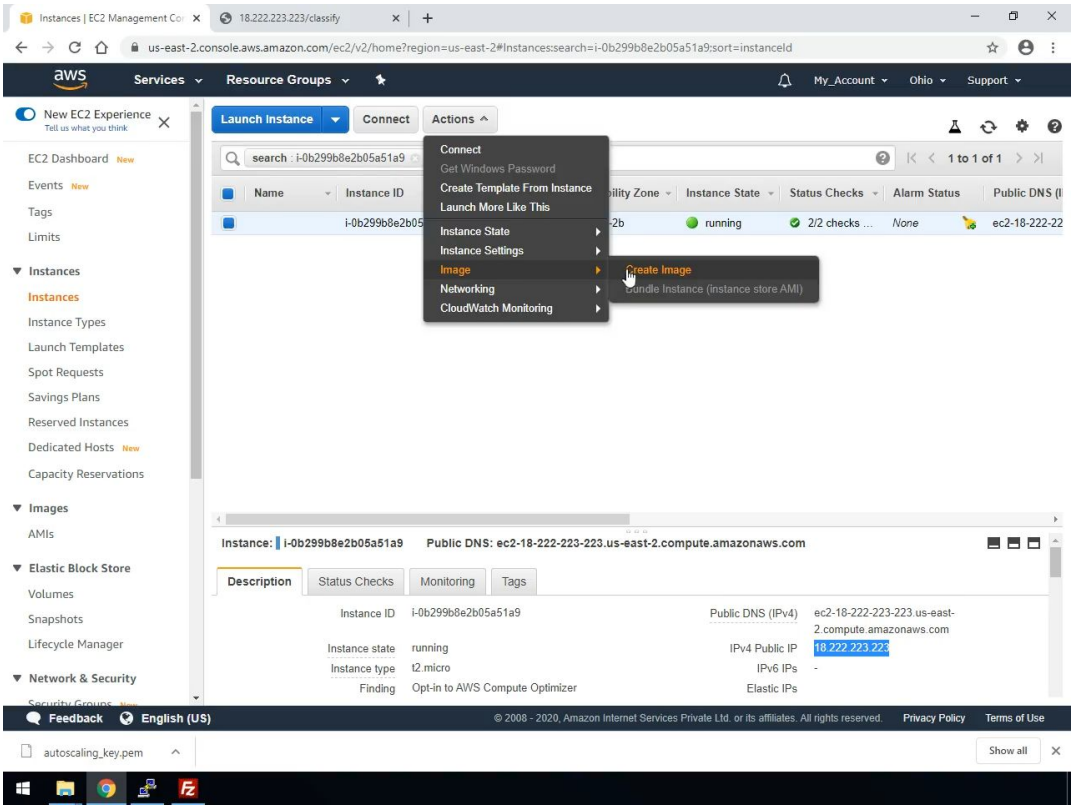
everthing in the host that we installed will copy to an image

and we can replicate this AMI in auto-scaling group

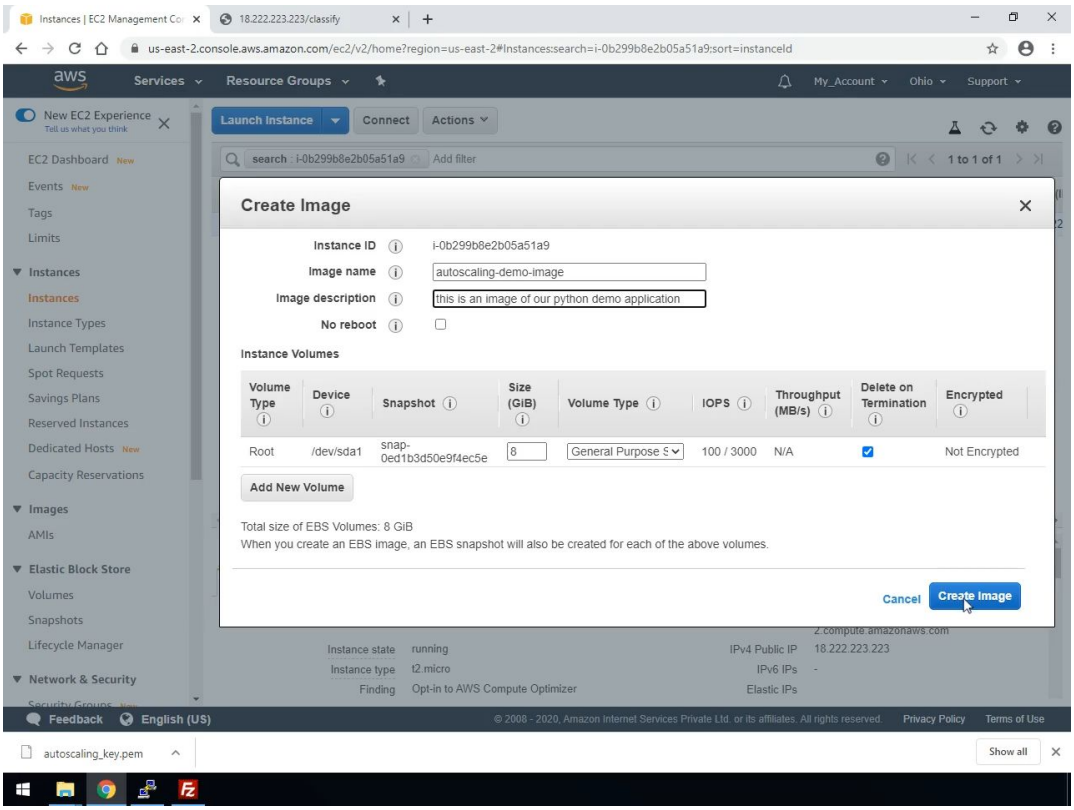
16:20

so the exact copy of this image is use whenever a new instance is launched by auto-scaling group

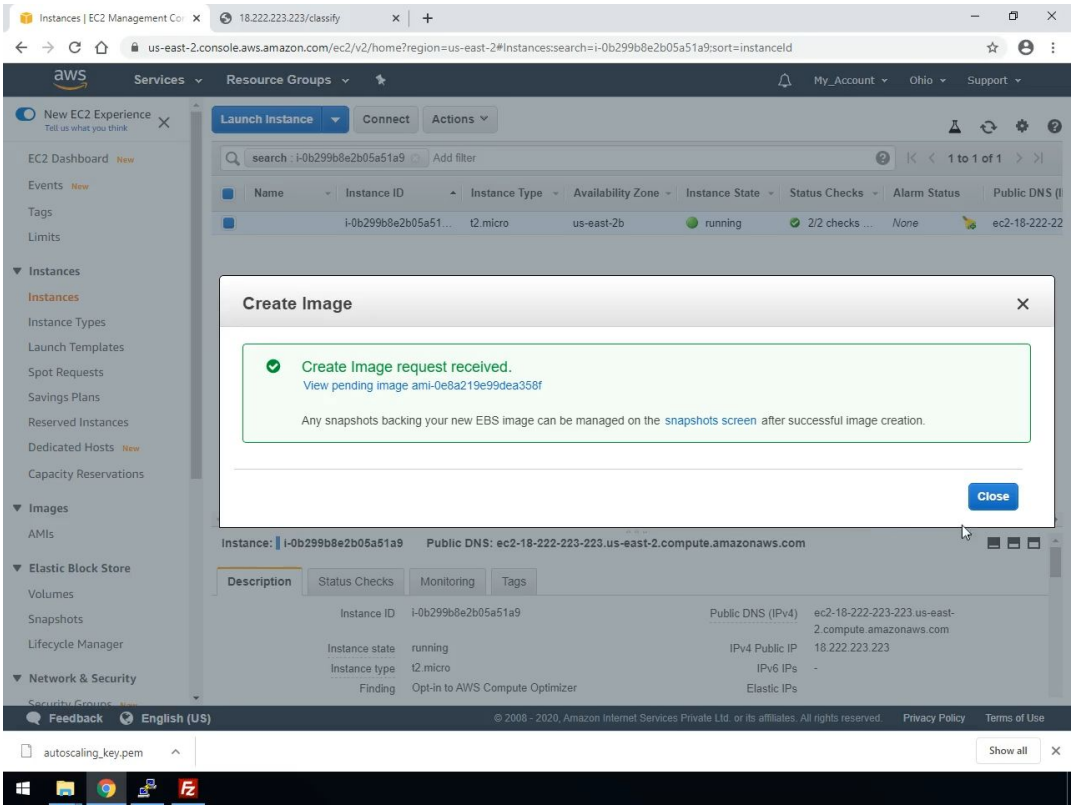
16:42



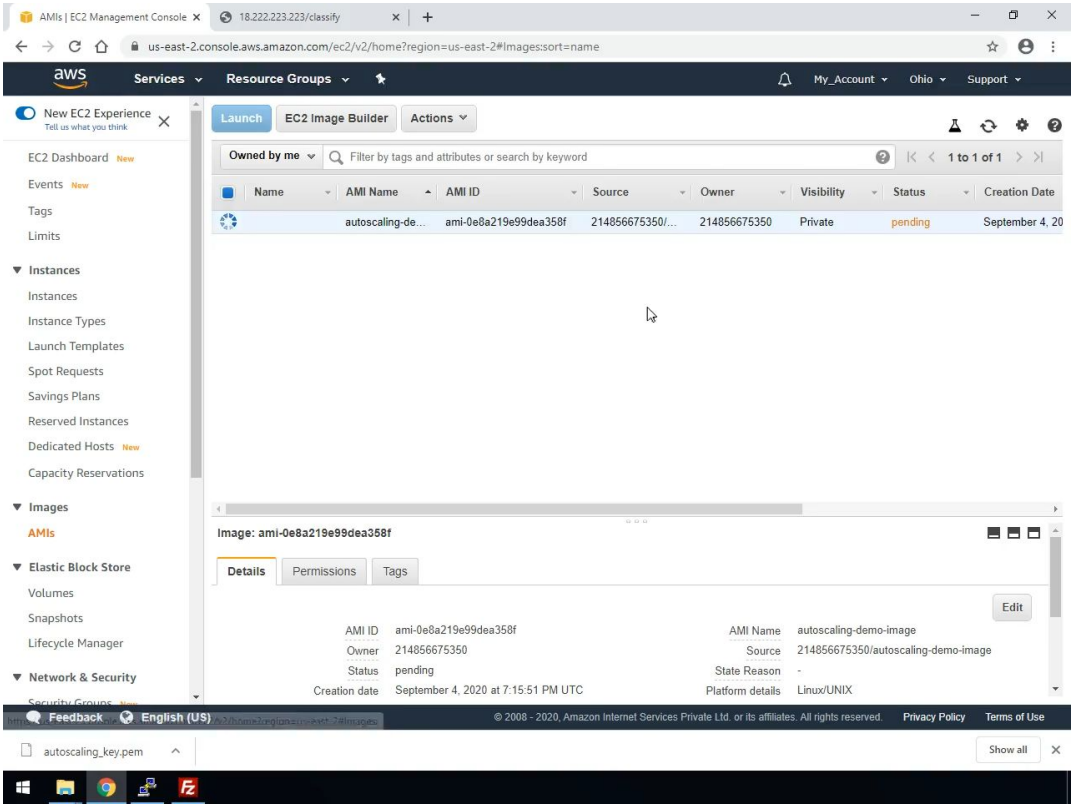
17:06


Create Image
Instance ID
i-0b299b8e2b05a51a9
Image name
autoscaling-demo-image
Image description
this is an image of our python demo application
No reboot
Instance Volumes
Volume Type
Device
Snapshot
Size (GiB)
Volume Type
IOPS
Throughput (MB/s)
Delete on Termination
Encrypted
Root
/dev/sda1
snap-0ed1b3d50e9f4ec5e
8
General Purpose S
100 / 3000
N/A
Not Encrypted
Add New Volume
Total size of EBS Volumes: 8 GiB
When you create an EBS image, an EBS snapshot will also be created for each of the above volumes.
Cancel
Create Image

17:30


Create Image
Create Image request received.
View pending image ami-0e8a219e99dea358f
Any snapshots backing your new EBS image can be managed on the snapshots screen after successful image creation.
Close

17:34


AMIs | EC2 Management Console
18.222.223.223/classify
us-east-2.console.aws.amazon.com/ec2/v2/home?region=us-east-2#Images:sort=name
Services
Resource Groups
My_Account
Ohio
Support
New EC2 Experience
Tell us what you think
EC2 Dashboard New
Events New
Tags
Limits
Instances
Instances
Instance Types
Launch Templates
Spot Requests
Savings Plans
Reserved Instances
Dedicated Hosts New
Capacity Reservations
Images
AMIs
Elastic Block Store
Volumes
Snapshots
Lifecycle Manager
Network & Security
Launch
EC2 Image Builder
Actions
Owned by me
Filter by tags and attributes or search by keyword
1 to 1 of 1
Name
AMI Name
AMI ID
Source
Owner
Visibility
Status
Creation Date
autoscaling-de...
ami-0e8a219e99dea358f
214856675350/...
214856675350
Private
pending
September 4, 20
Image: ami-0e8a219e99dea358f
Details
Permissions
Tags
Edit
AMI ID
ami-0e8a219e99dea358f
Owner
214856675350
Status
pending
Creation date
September 4, 2020 at 7:15:51 PM UTC
AMI Name
autoscaling-demo-image
Source
214856675350/autoscaling-demo-image
State Reason
-
Platform details
Linux/UNIX
Feedback
English (US)
© 2008 - 2020, Amazon Internet Services Private Ltd. or its affiliates. All rights reserved.
Privacy Policy
Terms of Use
autoscaling_key.pem
Show all

17:41